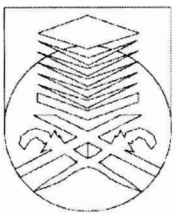

DEPARTMENT OF BUILDING SURVEYING
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA

A STUDY ON PREFABRICATED BATHROOM SYSTEM

NOR DARNA YANTO B. SAAIDIN
(2006136311)

BACHELOR OF BUILDING SURVEYING (HONS)

OCTOBER 2008

DEPARTMENT OF BUILDING SURVEYING
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA

A STUDY ON PREFABRICATED BATHROOM SYSTEM

"I hereby declare that this academic project is the result of my own research except for the quotation and summary which have been acknowledged"

STUDENT'S NAME : NOR DARNA YANTO B. SAAIDIN
SIGNATURE : .....

UITM NO : 2006136311
DATE : 28 NOVEMBER 2008

ABSTRACT

Prefabricated bathroom system will provide high technology system which one the latest system in construction industry. This system rarely had been used widely in Klang Valley. The typical system uses a fully furnished where assemble in factory based on the client's requirement. This means that the system is order-based because most prefabricated export to other countries. This research focused on nature condition of the system in applying to any building. In addition a planning approach including problems and additional cost for installation works for the system. To support this research, two (2) building that was apply prefabricated bathroom system has been taken as case studies at around Klang Valley. In addition, the data were gathered through structured interview and adopted information. From the analysis, it can be found that the cost is expensive for each unit and possible of rare usage among projects. Nevertheless this system is the best benefit in current user. This dissertation gives clear perception to the reader on the quality of prefabricated bathroom system and the information from this analysis can help the reader to choose what the suitable system for using this rare building segments.

ACKNOWLEDGEMENTS

With high gratitude to Allah S.W.T who gave me the ideas and physical strength in preparing this dissertation. I would like to express my thanks and gratefulness to a number of people who assisted and supported me during the compilation of this Dissertation.

First of all, I would to express my appreciation to Mr. Ellemy bin Iskandar, my supervisor, for the constant support and constructive advice, they has given me in the completion of this dissertation. Again, special thanks for them insightful supervision, encouragement, thoughtful criticisms throughout the research and her creative suggestions.

Finally, my grateful also goes to all those who agreed to be interviewed, formally and informally and gave me the benefit of their knowledge, views and experience. I am also indebted to all my friends for their moral support and encouragement during preparation of this final project.

Thank you.

CHAPTER 1

1.0 INTRODUCTION

This research project will be carried out in the fulfillment of Degree in Building Surveying, in Mara University of Technology. The research will provide the opportunity to researcher to explore the theory and practice of Prefabricated Bathroom Unit System implemented to the building in Malaysia.

According to the studies abroad most of the building in Japan, Hong Kong and Singapore already and widely used the system in purpose of easy installation especially in high rise building. Industrialized Building System (IBS) is an adaptation of oversea trend which developed in the Malaysian construction industry, particularly the usage of steel formwork systems, steel framing system, and prefabricated timber framing systems; block work system, steel roof structures, pre-cast concrete framing, panel and box systems for the construction of buildings, bridges, dam and other facilities and amenities projects.

Over last few years, Prefabricated Bathroom Unit System has been used specifically in Malaysia such as in Klang Valley and Seremban for residential, Institutional, hotel and office buildings. Although, the system required by legislation for such as type and purpose of the building. IBS that enables off-site prefabricated components manufactured at factories enable cost saving, time